Cultural Resources

ARCHEOLOGICAL RESOURCES

Historic Archeology

Historic archeological sites in the Park are largely associated with transportation corridors, water sources, and mining and ranching operations of the late 19th and early 20th centuries. The research and information potential of historical archeological sites is an important aspect of their National Register eligibility.

Status of Archeological Research

Although it is estimated that only about 6 percent of the lands within the boundaries of pre-1994 Death Valley National Monument (and an even smaller proportion of the lands added to the monument in 1994) have been surveyed for archeological resources, the overall cultural sequence is well documented. In particular, the archeological research and survey efforts of Alice Hunt and William Wallace, conducted primarily during the 1950s and 1960s, have formed the bulk of extant data about prehistoric native cultures. Over 2,000 archeological sites, covering some 10,000 years of human activity, have been identified. Archeological sites include house circles; habitation areas; complex sites; rockshelters; campsites; workshops; quarries and lithic scatters; hunting blinds; plant food processing stations; storage pits; cemetery and burial areas; rock art (petroglyphs/pictographs); rock alignments; and rock traps or caches. Areas of particular archeological significance within the Park boundaries include Butte Valley, Mesquite Flat, the floor of Death Valley, Grapevine Canyon, high elevation localities in the Panamint Mountains, alluvial fans on the west side of Death Valley, and springs.

More recent archeological survey has been driven by compliance actions and salvage operations related to Park development plans. These efforts, although more up-to-date in terms of professional scientific standards, have sometimes lacked a cohesive research design which would tie them to larger issues of a parkwide or desert-wide nature. As a result, past researchers have often been forced to treat individual sites in different portions of Death Valley as culturally distinct entities, resulting in sometimes confused cultural sequential chronologies.

At present, the National Park Service is completing a three-year systematic, parkwide archeological survey of at-risk areas under a cooperative agreement with the University of California, Riverside.

Landforms and Archeological Resources

While archeological sites are found on virtually every type of landform in the Park, the persistent association of certain features with archeological sites allows for fairly reliable estimates about the types of landforms that are likely to support sites. Proximity to fresh water and food resources are the primary variables influencing Native American site location. For example, a spring in or near a mesquite grove would be an optimal location for a site. An alluvial fan generally lacks resources and would not have been a primary occupation or food collecting and processing site, but may have been the location of food storage facilities or a temporary campsite, trail, burial site, or rock art site, all of which fall outside of the parameters of a model based solely on subsistence variables.

However, previous environmental conditions must also be considered. Ancient late Pleistocene Era/early Lake Mojave Period beach features associated with now-extinct lacustrine and riparian habitat were prime occupation or food collecting and processing sites over 6,000 years ago, in spite of what the present landscape may look like.

Euro-American sites, while generally more easily identified than prehistoric sites, are generally associated with transportation networks and resource procurement/exploitation features. In the Park, transportation routes, water sources, and mining operations are prime locations where such archeological sites may be found. The network of interconnecting roads is usually preserved and is easily discernible from aerial photographs and early maps.

National Register of Historic Places

No prehistoric archeological sites or districts within the Park boundaries are listed on or have been determined eligible for listing on the National Register of Historic Places.

Draft National Register nomination forms for archeological districts in the Park that have been prepared include: Butte Valley, Mesquite Spring, Racetrack-Goldbelt, Ubehebe Crater, Upper Emigrant, Upper Panamint, Death Valley Salt Pan, Furnace Creek, Mesquite Flat, Grapevine Canyon, Ibex Spring, Keane Wonder Mine, Saratoga Springs, and Lower Vine Ranch.

The National Park Service is planning to prepare national register nomination forms for archeological

districts such as Furnace Creek Wash, Saline Valley, and Eureka Valley.

HISTORIC RESOURCES

The Park has an impressive inventory of historical resources. The mountains and valleys contain sites associated with early Spanish and American exploration and survey of the vast Mojave Desert region, and the area is laced with remnants of prehistoric and protohistoric Native American trails as well as Euro-American trails, wagon roads, railroads, highways, and other early transportation arteries. The region contains numerous remnants of abandoned mining operations, sites of settlements long gone and nearly forgotten, railroad grades and railway structures. Fence lines, water tanks, and corrals testify to a continuing ranching-grazing industry and scattered remains of homesteads tell of a time when small farming operations were attempted in this arid land. There are significant reminders of early recreational and resort development associated with the advent of tourism to the region, as well as reminders of early federal government administration of portions of the area, including administration, maintenance, and residential buildings constructed by the Depression-era Civilian Conservation Corps.

Timbisha Shoshone Village

The Timbisha Shoshone people have lived in and around Death Valley since prehistoric times. During the late 1920s and early 1930s, members of the Tribe lived in four different locations in the Furnace Creek area. Finally in 1936 the Bureau of Indian Affairs and the National Park Service agreed on a site of approximately 40 acres for a permanent residential area south of Furnace Creek Ranch. This site became known as the Timbisha Shoshone Village.

In 1936, under NPS supervision, construction started on nine adobe residences, using materials provided by the Bureau of Indian Affairs. Adobe was one of the common construction materials of the day, also used in many NPS structures.

The following year two communal facilities—laundry and a trading post—were constructed by the Civilian Conservation Corps under NPS supervision. Up until the 1940s, the village adobe structures housed most of the Timbisha Shoshone families living in the Death Valley area. Some moved elsewhere during World War II because of the lack of employment opportunities in the area of the Park. In the 1950s the National Park Service removed five adobe structures that were perceived to be vacant or semi-occupied, leaving six structures.

During the early 1980s, the remaining structures were rehabilitated and additional housing was purchased and moved to the village. The village has maintained a population of approximately 40–50 persons through the 1980s and the 1990s.

Beginning in the 1930s, and for many years afterwards, the Tribe was issued a permit for use of the village site. In 1983 the Timbisha Shoshone Tribe was granted federal recognition by the Secretary of the Interior. No permitting procedure has been used for many years.

Warm Springs – Saline Valley

Three natural hot springs in Saline Valley, known collectively as the Warm Springs, have become a popular recreational spot during the post-World War II era. Although events surrounding the early recreational use of the Warm Springs are somewhat obscure, local Euro-Americans had begun visiting and soaking in the springs by the early 1940s. By 1947, a small concrete tub had been constructed at the Lower Warm Spring, presumably by a cattleman or a sheepherder, to catch the runoff.

As growing numbers of people began visiting Lower Warm Spring, the most accessible of the three springs, to camp and soak in the warm water, the area slowly became "trashed." Despite the gradual "trashing" of the Warm Springs vicinity, however, some visitors wrote accounts describing the natural beauty of the area. During the fall of 1964, visitors to the Warm Springs began cleaning up the area, and in 1965 a new and larger tub was constructed at the Lower Warm Spring that could accommodate as many as a dozen people for soaking.

Palm Spring, sometimes referred to as Middle Warm Spring, is located about one-half mile above Lower Warm Spring. Less protected from the wind and sun than Lower Warm Spring because it is not surrounded by mesquite trees, it nevertheless became increasingly attractive as an alternate soaking area, partly because of the panoramic view of the surrounding valley and mountains that it provided. Like Lower Warm Spring, Palm Spring has a source pool of its own. People soaked in the source pool until 1968 when a group of users built a small retaining wall around the pool, laid a buried pipe to it, and constructed the first soaking pool.

The isolated Upper Warm Spring, located some three miles above Palm Spring, has no man-made soaking facilities. During the early 1980s, however, the Bureau of Land Management constructed a

fence around the spring to prevent feral burros from having access to the water. Desert pupfish were introduced in the springs, but they did not long survive. Thereafter, Upper Warm Spring was used as a soaking site by those who wanted to get away from the more popularly-used springs below.

By the late 1960s the Warm Springs had become a mecca for "hippies" and those preferring hedonist lifestyles characteristic of the era. Since that time, the Warm Springs have been the focus of steadily increasing visitation as a result of word of mouth recommendations and listings in popular hot springs literature. Whereas one party a week was common during the early 1960s, visitors began to stay at the springs for longer periods of time. Often parties of two or more began to camp at the springs for weeks or months, particularly during the winter season, but the greatest use of the springs came from "regulars" who began to make short but frequent trips to the springs. To accommodate the growing numbers of visitors during the 1960s and 1970s, the users constructed various improvements at Lower Warm Spring, including several larger soaking pools, a deck, separate pools for washing dishes, and a fish pond. In addition, a lawn and palm trees were planted and two airstrips were laid out nearby.

During the past two decades, "regulars" to the Warm Springs, "consisting of an eclectic collection of bohemians, loners, individualists, tourists, and others who simply share a love for hot springs and a desire to escape from the complexities of modern life," have developed an informal self-policing community that maintains and cleans the springs and their vicinity. As a result of the increasing concern of springs' users that federal land management agencies would regulate activities at the Warm Springs, the users have formed an organization to protect their interests — the Saline Preservation Association (SPA).

Cultural Landscapes

Many cultural landscapes exist in the Park that are potentially eligible for listing on the National Register, but cultural landscape studies have not been undertaken to identify their character-defining elements. Landscapes reflecting mining, ranching, ethnographic, and administrative activities can be seen throughout the Park. Especially significant landscapes are found at Scotty's Castle, Lower Vine Ranch, and the salt tram in Saline Valley, and, in association with many of the CCC-era national monument administration structures. Other significant cultural landscapes include the: (a) contemporary Timbisha Shoshone Village; (b) Chloride Cliff and Keane Wonder mining sites; (c) Cow Creek CCC maintenance yard and administrative area; (d) Harmony Borax Works; (e) various large and small mining sites; (f) cultivated areas and orchards connected with ranching and agricultural activities; and (g) extensive layouts of gardens, groves, and recreational facilities related to tourist resorts.

National Register of Historic Places

Six historic period properties in Death Valley National Park are listed on the National Register of Historic Places:

- Skidoo — April 16, 1974
- Harmony Borax Works — December 31, 1974
- Eagle Borax Works — December 31, 1974
- Saline Valley Salt Tram Historic Structure — December 31, 1974
- Leadfield — June 10, 1975
- Death Valley Scotty Historic District — July 20, 1978

Five historic properties in the Park have been determined eligible for listing on the National Register of Historic Places:

- Residential, Administrative, Maintenance, and Visitor Use Facilities in Death Valley National Monument Built by the Civilian Conservation Corps — (Multiple Property Nomination) — May 10, 1989: Camp Wildrose Historic District, Cow Creek Historic District, Emigrant Junction Comfort Station (E-85), Park Village Comfort Station (PV-69), Texas Spring Campground Comfort Stations (TS-113, TS-114) and stone picnic tables
- Original Bullfrog–Bullfrog West Extension Mine — September 18, 1980
- Homestake-King and Gold Bar Mines and Mills — July 6, 1981
- Las Vegas and Tonopah Railroad Grade — July 8, 1981
- Lee Historic District — October 5, 1982

Seventeen draft national register nomination forms have been prepared for the following properties in the Park in connection with the aforementioned *Historic Resource Study: A History of Mining*. The forms have been submitted to the NPS Pacific-Great Basin Support Office, but no formal determinations of eligibility have been processed for them:

- Big Talc Mine
- Garibaldi Mine
- Gold Hill Mill
- Harrisburg Historic District

- Hungry Bill's Ranch Historic District
- Journigan's Mill
- Lemoigne Mine and Cabin
- Lost Burro Mine and Mill
- Panamint Treasure Mine
- Queen of Sheba Mine
- Wildrose Canyon Charcoal Kilns
- Chloride Cliff Historic District
- Echo Canyon Historic District
- Greenwater Historic District
- Keane Wonder Historic District
- Corduroy Road
- Furnace Creek Wash Historic District

Three draft national register nomination forms have been prepared for the following historic properties in the lands that were added to the national monument in 1994:

- Barker Ranch
- Panamint City
- Gem Mine and Mill

Four draft national register nomination forms were prepared by the Timbisha Shoshone Tribe through a NPS Historic Preservation Grant:

- Mushroom Rock
- Ubehebe Crater
- Navel Spring
- "Tumpisa" District (Furnace Creek area)

Museum Collection

Park staff are responsible for monitoring, documenting, and preserving a large, diverse museum collection that includes more than 177,000 cataloged objects and specimens, some stored in substandard conditions. An additional 23,000 archeological artifacts and records are at the NPS Western Archeological Center in Tucson, Arizona. Museum collections include historical objects and archival documents, archeological artifacts, ethnological materials, biological specimens, geological samples, and paleontological materials. Numbers of currently cataloged objects in the various disciplines range from an estimated 78,900 historical objects to approximately 280 ethnological items. There are potentially 1,600 objects associated with the Native American Graves Protection and Repatriation Act of 1990. Many of these objects may be returned to the Tribe as a result of this act.

In 2000, the National Park Service opened a new state-of-the-art curatorial facility at Cow Creek. The museum collection constitutes an important part of the overall resources offered by the Park. In historic districts, the collection constitutes a primary resource that visitors view. A relatively large number of historic objects are on display in the national register–listed Death Valley Scotty Historic District. Diverse material types are exhibited in the historic house museum as well as on the grounds.

Plan Actions

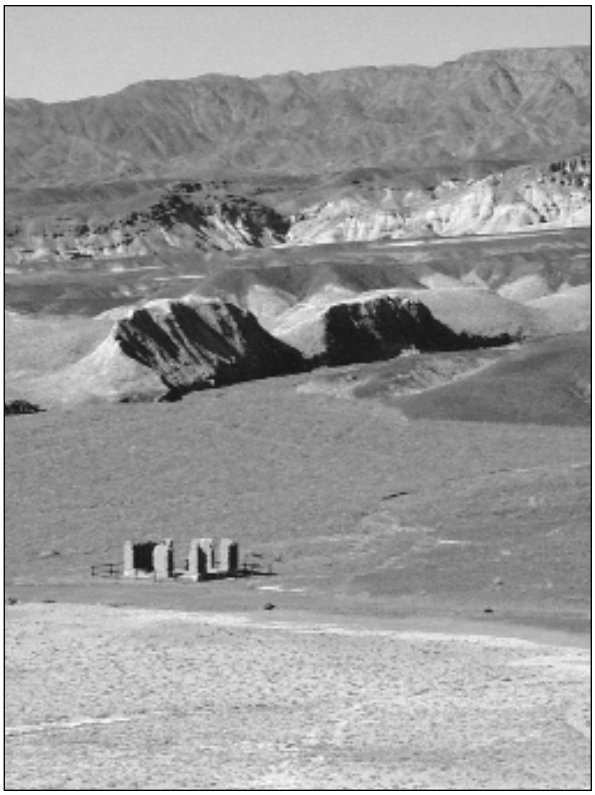
The National Park Service will develop and implement a systematic, integrated program to identify, inventory, monitor, evaluate, and nominate archeological sites, historic properties, cultural landscapes, and ethnographic resources to the national register and will manage, protect, and preserve such listed properties in a way that will preserve their documented archeological, architectural, ethnographic, historic, or research values. A collection management program will be further implemented to: (1) improve storage conditions to meet standards for all Park collections stored; (2) provide a more comprehensive preventive conservation program; (3) acquire museum objects/ specimens, including appropriate replacement furnishings for highly impacted objects targeted for exhibit; and (4) improve collection access and use, as appropriate. The collections management program will include cataloging the significant backlog of objects and collections at the Park and correcting the deficiencies identified in the "Checklist for Preservation and Protection of Museum Collections."

The National Park Service will develop and implement a systematic applied cultural resource research program to ensure that (1) there will be adequate baseline information on location, condition, threats, and

significance/ integrity of resources; (2) interpretation and preservation treatment of resources will be accurate; and (3) appropriate means will be used to manage, protect, preserve, and interpret Native American heritage or other ethnographic resources. The research program will include the following studies:

- archeological studies, including a regionally based archeological research plan, an updated archeological overview and assessment, and completion of archeological identification and evaluation studies
- ethnographic studies, including a cultural sites inventory
- historical studies, including a cultural landscape inventory and cultural landscape report, historic structure reports, an administrative history, and an updated list of classified structures
- an updated scope of collections statement and collection management plan

The Park's resource management plan will address the requirements, projects, and funding to implement the cultural resource program. To support this program, the National Park Service will develop collaborative partnerships with government agencies, tribes, and public and private organizations that have cultural resource management or research capabilities or expertise. These entities could include federal, state, and county agencies, academic institutions, local and regional cultural and historical organizations, and the Timbisha Shoshone Tribe or other Native American tribes having affiliation with lands in the national park. To achieve cultural resource program objectives, under the authority of 36 CFR 1.5, the National Park Service might control or limit human activities in areas designated as culturally sensitive or threatened.



Native American Interests

Background

For millennia, American Indian peoples lived within the Death Valley area, using the resources and lands to sustain their lives and cultures. In the l950–1960s, Federal Indian Lands Claims cases involving Chemehuevi, Mojave, and Owens Valley Paiute tribes included documented occupation and use of many mountain ranges, valleys, and resources in the region. Today's tribal governments and communities historically associated with the study area are as follows:

- Lone Pine, Fort Independence, Big Pine, and Bishop Indian Reservations were originally established by presidential executive order in 1912. These Owens Valley reservations were altered by land exchanges in the late l930s for residential purposes for Owens Valley Paiute populations. Each reservation is several hundred acres but cannot support development of tribal enterprises. Wage work, some small-scale ranching and gardening, and some crafts provide income to tribal members. Each community is from 250 to 400 enrolled persons, including intermarried Shoshone and other individuals.

- Timbisha Shoshone tribal peoples include those known as Coso, Panamint and Death Valley Shoshone who ranged within a large area including most of Death Valley National Park and nearby Bureau of Land Management lands north of Ridgecrest, CA, and along the Nevada–California state line. The Timbisha Shoshone Tribe was federally recognized in 1983 and has approximately 300 enrolled members.

- The Las Vegas Piute Tribe is composed of "Nuwuvi" people, called Paiute by others, who inhabited present-day southern Nevada from pre-European time to present. In 1911 a small parcel of trust land was established near the town of Las Vegas. Today, the Tribe owns the original 16-acre area and a 3,800-acre area north of metropolitan Las Vegas. The Tribe numbers about 100 people who gain their economic support from tribal tourism enterprises, retail sales, and wage work.

- The Pahrump Paiute Colony is a nonfederally recognized community of Paiute families in the Pahrump, Nevada area. This organization has served the social and political purposes of the people for more than two decades. It has an informal council leadership and operates on traditional principles of consensus. Population is unknown.

Plan Actions

For thousands of years, the Timbisha Shoshone Tribe has lived in and around the area that is now Death Valley National Park. For many years, the Tribe sought to obtain trust land within its aboriginal homeland. In 1994, Congress enacted the California Desert Protection Act, P.L. 103- 433, including Section 705(b) which begins to address the need of the Tribe for a recognized land base. Section 705(b) directs the Secretary of the Interior to conduct a study to identify lands suitable for a reservation for the Timbisha Shoshone Tribe which has no land base at present.

The draft report, "The Timbisha Shoshone Tribal Homeland (1999)," contains the recommendations of the joint Federal-Tribal negotiating team responsible for carrying out the suitability study. The study was conducted on a government-to-government basis with officially designated representatives of the Timbisha Shoshone Tribe and the Department of the Interior. It resulted in a comprehensive integrated plan to establish a permanent Homeland for the Tribe based on an analysis of the suitability of various lands within the tribal ancestral homeland in relation to basic tribal needs and consistency with Federal land management and stewardship mandates.

Among the factors restricting the ability of the negotiating team to identify a single contiguous area suitable for the establishment of a reservation were: natural limitations, including climate, geology, and the availability of water; mining claims; special resource designations such as Wilderness and Area of Critical Environmental Concern; and the availability of infrastructure such as roads, power, and other services.

This draft report concludes that the transfer of several separate parcels of land is needed and recommends transfer of 7,500 acres in trust to the

Timbisha Shoshone Tribe. These parcels include 314 acres at Furnace Creek in Death Valley National Park encompassing the present Timbisha Village Site subject to jointly developed land use restrictions designed to ensure compatibility and consistency with tribal and Park values, needs and purposes. Based on the proposed land use restrictions and opportunities for future close collaboration with the Tribe, the National Park Service and the Tribe believe that the transference of Park land described above will enhance the cultural and historical interpretative opportunities available to the visiting public, but will not adversely impact Death Valley National Park. The report also seeks authorization to purchase two parcels of approximately 120 acres of former Indian allotted lands in the Saline Valley, California, at the edge of the Park, and the 2,430 acre Lida Ranch near Lida, Nevada from private owners.

This report also recommends a number of other arrangements authorizing tribal access to and traditional uses of, certain designated areas which will remain in public ownership. One example of the latter type of arrangement is the recommendation to seek designation of an area primarily in the western part of Death Valley National Park as the Timbisha Shoshone Natural and Cultural Preservation Area within which low impact, environmentally sustainable, tribal traditional uses, activities and practices will be authorized subject to existing law and a jointly established management plan agreed upon by the Tribe, the National Park Service and the Bureau of Land Management. The Tribe, the National Park Service, and the Bureau of Land Management see such a designation as a way of recognizing the common interests of the agencies and the Tribe in conserving and protecting this area. Examples of traditional tribal uses, practices and activities include seasonal camping, gathering pinyon nuts and other plants for medicinal purposes, but not the taking of wildlife within the Park.

The legislation affirms that the continued presence of the Tribe in the Park and in other parts of its ancestral homeland benefits the Park, the Tribe, and the American people. In October 2000, the President signed legislation (P.L. 106-423) implementing the recommendations of the report.

The potential impacts of the land transfer are analyzed in the *Final Legislative Environmental Impact Statement, Timbisha Shoshone Homeland* (2000). Any development or resource use activities will be part of future planning efforts and will be subject to appropriate National Environmental Policy Act compliance and public review.

Visitor Use, Services, and Facilities

Death Valley National Park has long provided recreational opportunities for people from all over the world. Its nearness to major population centers such as Los Angeles and Las Vegas, combined with major interstate highways, gives residents the opportunity for relatively easy access to many parts of the desert. Most of the landscape is open, with broad vistas of relatively undeveloped land. The vastness of the landscape offers visitors an opportunity for seclusion and a sense of wilderness, even while in a vehicle. Early miners and ranchers developed roads that today offer visitors a chance to drive into many remote locations where informal camping has traditionally occurred. The many roadless areas offer hikers the experience to explore. There are many cultural sites such as abandoned mining districts that many people love to visit. The mountain ranges, such as the Panamint and others offer a contrast to the dry hot valleys, attracting many people in the summers with cooler temperatures and forested areas. Exposed geology and unique wildlife and vegetation are other elements that attract people. The land has many extremes and contrasts which people come to experience, such the high summer temperatures. Most visitors come to the desert simply to see the outstanding scenery of this diverse landscape.

Carrying Capacity

Park managers are often faced with decisions about how much use of a particular area is appropriate, given the need to protect resources. Decisions regarding buildings, such as museums and historic structures, are usually dictated by law and the physical capacity of the space to contain people. Visitors face these limits everywhere they go and they are widely accepted. Similar decisions regarding natural spaces are not as easily derived, nor readily accepted. Most people understand that there is a need to limit the number of people that can float the Colorado River at the same time, in order to preserve the experience. However, determining how many people can use a particular area of the Park without impacting resources or other visitors experience is often more difficult.

A widely accepted definition of carrying capacity is:

> *"the character of use that can be supported over a specific time by an area developed at a certain level without causing excessive damage to either the physical environment or the experience of the visitor."*

There are three principle components that relate to determining the carrying capacity for a national park:

The ecological or physical capabilities of the natural and cultural resources to sustain certain levels of visitor use without reaching unacceptable levels of damage. Each landscape may have varying abilities to absorb different kinds of and levels of visitor use before unacceptable levels of impact occur.

The sociological carrying capacity is the ability of visitors to enjoy and appreciate these resources without interference by other visitors. Determining social carrying capacity can be one of the most difficult parts of the three components. Identifying numbers relating to visitation in an area is not a valid determinant of a quality visitor experience. Other factors such as visitor behavior, preconceived expectations, and social norms of the dominant user group can also effect visitor enjoyment.

The type and amount of NPS management that has been, or can be applied to the activity to mitigate unwanted impacts is also a factor. The third component relates to the management of park roads, parking lots, buildings, trails, and visitor information. For example, providing interpretive services is an effective way to instill in the visitor an understanding and appreciation for park resources. Such understanding helps implement carrying capacity for a particular area. Limiting parking in certain areas can effectively limit visitation.

The implementation of recommendations as called for in this plan will increase the level of protection for fragile or sensitive resources. Until future implementation plans are developed, the National Park Service should manage visitor activities in a way that leans toward resource protection. Preservation of sensitive species and their habitats is a priority and

sensitive population resource degradation due to public use or other activities would not be allowed. Aggressive and appropriate action will be taken to protect these habitats until the degraded habitat has been restored and appropriate long term protection for the species has been put in place.

General management plans provide NPS managers with management direction on a broad, prescriptive level. Management objectives for carrying capacity are thus written as narrative statements. These statements define the desired future visitor experience and resource conditions in qualitative terms such as "sense of seclusion," or "low degree of tolerance for resource degradation." The qualitative descriptors that have been identified as "desired visitor experience and resource conditions" will be refined and translated into quantitative standards during future implementation planning. As previously mentioned, indicators and standards of quality for both the physical and social environments will be developed within future implementation plans. These products will be quantifiable and measurable aspects of the carrying capacity process.

Desired Future Conditions

Desired future conditions for natural and cultural resources and the visitor experiences are described below. The descriptions are qualitative in nature and can be translated into quantitative standards over time during the implementation of this plan. Some descriptions could be applied to broad areas such as wilderness, while others apply to smaller areas such as road corridors and points of development. These descriptions serve as guides for managing the land and facilities to achieve desired carrying capacities.

Natural Areas

An informal, self-guiding learning experience is provided for visitors in these areas. People are encouraged to get out of their vehicles and walk to features. The pace is slower with low to moderate levels of noise. Visitors typically focus on specific resources with few visual intrusions. Visitors experience a sense of learning through onsite interpretation or other means.

The length of stay at each site is relatively short in comparison to the time the visitor spends in the Park. There is a moderate amount of social crowding and moderate social interaction at points of interest and along dead-end trails. Guided ranger walks are occasionally provided for visitors at some locations. Development is limited to items such as low interpretive panels, small directional signs, and hardened dirt paths. Fences and boardwalks are used as a last resort to protect resources if other management efforts do not work. The tolerance for resource degradation is low to moderate, depending upon the sensitivity of the resource to impacts by use. The degree of onsite visitor and resource management is moderate and increases or decreases with visitation levels.

Sensitive Resources and Habitat Types

The Park management will continue to protect, restore and enhance all habitat areas, especially those that are identified as sensitive or critical, per law and NPS policies. The level of detail regarding the biological function of habitat types and definition of desired future conditions will be developed within the framework of a parkwide resource management planning effort.

Wilderness

Visitors in this landscape experience a primeval environment largely untrammeled by humans, where the land retains its primeval character and influence, without permanent improvements or human habitation, but may contain features of scientific, educational, scenic or historic value. Elements of modern human occupation are not appropriate unless they meet the criteria of the Wilderness Act. Some sections of wilderness within the Park may have remnants of human occupation, but these features are considered a part of the history and scenery to be explored. A high degree of physical exertion may be required to hike or ride horseback to this area. A minimal amount of hiking trails may be present, often requiring a person to travel cross-country to get to a desired destination. Abandoned roads may be used as routes of travel. Opportunities for independence, closeness to nature, tranquility, and the application of outdoor skills are high. Opportunities for social interaction with other visitors are low, as is the probability of encountering NPS employees. Likewise, evidence of other visitor impacts is minimal.

The landscape offers a high degree of challenge and adventure for visitors. The visual quality of the landscape contributes significantly to the visitor experience and needs to be protected. The tolerance for resource degradation is low, with the exception of designated trail corridors, where a slightly higher level of degradation is allowed within a few feet of the trail and at points where camping occurs. A minimal amount of resource and visitor management is present. Offsite visitor management (provision of information) is low to moderate.

Historic Preservation Areas

Historic preservation areas offer visitors a chance to gain a sense of the past without compromising the integrity of the resource. Often there are opportunities to learn by vicariously experiencing the emotions and thoughts of those who lived in the past. The experience is often a visual one, enhanced by smells, sounds, and a sense of physical space. Interpretive information adds color and meaning to the experience.

The degree of tolerance for resource degradation is low for historic resources. The chance of seeing other visitors and having social interaction is potentially high, depending on the degree of public access and visitor interest. The opportunity for contact with NPS personnel is high where ranger-led tours are offered. Visitor behavior is managed to protect the character of each place. NPS onsite management is high at sites with high visitation and impact sensitivity. Paved walks, fences, and interpretive panels are used as needed to accommodate public access and interest. If interest is high, improvements may be needed to allow visitors to experience these resources while protecting them from visitor use impacts. Improvements must not distract from the significance of each location. Some features are convenient and easily accessible with little need for visitors to exert themselves, apply outdoor skills, or make a long time commitment to see the area. Some features are located at remote locations and require more effort and skill to experience. Adventure is often a part of the visitor experience at these places. The way in which people currently gain access to these locations remains unchanged since this experience contributes to resource protection and its appreciation. Changes in access should only be made if there is strong justification to do so. Remote locations should provide a primitive setting with opportunities for solitude, exploration, and learning, with minimal amounts of human intervention such as signs or interpretive panels.

Visitor Facilities

The visitor experience in these areas is heavily influenced by structures and other fabricated features, and they are part of the visitor experience. The pace is varied with opportunities to walk and drive. The site often is noisy with vehicles and people nearby. Visitors have opportunities to learn about Park resources and receive many services from facilities. Visual distractions from other visitors and their vehicles are common and expected. Buildings and other facilities are predominant, but where exceptional natural elements or cultural elements are present, they should be made part of the visitor experience. These constructed features are coordinated by design to reduce visual contrast with the natural or cultural setting. Although these are developed areas, they should still offer a contrast from urban life and a chance to relax and enjoy the outdoors.

Most facilities are convenient and easily accessible by the public. Many areas provide a strong opportunity for social interaction. Encounters with NPS staff are frequent. The tolerance for social crowding is high but there are opportunities to learn and experience a change in pace from city life. Most facilities are accessible to visitors with disabilities. Resource impacts at visitor facilities are as low as possible and occur only when there is no practicable alternative. Visitors and facilities are intensively managed for resource protection, visitor management, and safety (that is, there may be fences, law enforcement may be more intensive, and visitor activities may be monitored or restricted).

Paved and Graded Roads

Paved and graded roads are the dominant experience for most Park visitors. Visitors use these narrow corridors and roadside pullouts for touring, enjoying scenic overlooks, and gaining access to natural and cultural features. While traveling, visitors may read about and understand the features they are seeing. Bicycle travel is allowed, but motorized vehicles are more common. Viewing the scenery is very important, but the views are often of distant landscapes. Vistas are protected. First-time visitors may have a sense of exploration, but very little physical exertion is needed, outdoor skills are not necessary. Visitors may spend a long time in this zone. The probability of encountering other visitors is very high, although chances for social interaction are low except at roadside pullouts. The opportunity for direct contact with NPS staff is low unless emergency situations arise.

A moderate to high level of NPS management (highway signs, visitor protection) is needed to provide visitors with a safe and enjoyable experience. Because maintenance work and driving off roads cause dirt roads to grow wider, it is necessary to specify maximum road widths and approved pullouts. Roads are limited to specified widths unless where strong justification exists. Resources can be modified for essential visitors and administrative operational needs. The tolerance for resource degradation in these corridors is moderate. Allowable impacts are restricted to a short distance from roads and pullouts.

Unmaintained Dirt and Four-Wheel Drive Roads

Unmaintained dirt roads provide a unique experience for drivers and other users such as mountain bike riders, equestrians, and hikers. The predominant use is by visitors in vehicles driving to enjoy the scenery, or to go to historic mining sites, or to a specific feature. Some visitors experience a strong sense of exploration, challenge, and adventure. Travel speeds are slow to moderate, with the potential of frequent stops. Many of these roads give visitors a sense of escape from urban life. The areas through which these roads pass are predominantly natural, but there is some evidence of people having used the area in the past and present. Increased impacts from human use are prevented to protect the existing qualities of the landscape. Support features such as small directional signs or interpretive panels are present but infrequently seen and inconspicuous in character.

Visitors may need to extend themselves, use outdoor skills, and make a long time commitment. Some roads within the Park have rough conditions that often require specific driving skills and more time to complete the route. Opportunities for challenge and adventure are available on some 2-wheel drive roads that require high clearance vehicles. Opportunities for social interaction are low, unless people are traveling in a group. A moderate level of management is provided on heavily used roads to protect resources and visitors. Many people who use these roads do not wish to see many other vehicles.

Resource modification is evident, but where possible, should harmonize with the natural environment. The Park's tolerance for resource degradation in this zone is low except that limited signs, road surfaces and shoulders, pullouts, and camping areas are permitted. It is recognized that some 4-wheel drive roads have a number of short sections that have been widened by natural occurrences such as washouts.

INTERPRETATION

Background

An "Interpretive Prospectus" (NPS 1990) was completed for Death Valley National Monument in 1990. The prospectus identified interpretive planning and development details appropriate for the monument. The expansion of Death Valley and the designation of large tracts of wilderness have made this plan obsolete.

Plan Actions

The Park interpretive program will integrate in a balanced fashion the geological, cultural, and biological aspects of the Park. Through its primary interpretive themes, programs and interpretive information will concentrate on the harsh environment and the adaptations that all living things must make to survive. The three key subjects to be interpreted will include:

- geological processes and geographical relationships
- the cultural, historical, prehistoric, and Native American record
- desert ecosystems

The Park staff will continue to seek ways to improve the educational outreach program in surrounding communities and develop partnerships with local schools and similar groups. The intent of this program is to increase local community awareness of the Park purpose and resources, and continue to develop favorable partnerships and mutual support.

A comprehensive interpretive plan will be developed to replace the 1990 interpretive prospectus. This plan will reflect the additional Park lands, present individual site plans, and identify other appropriate support documents. It will also address the interpretive needs of Scotty's Castle and its related resources and will identify additional opportunities for visitors to learn more about the castle and its builders. Until the new comprehensive interpretive plan is developed for the entire Park, the current prospectus will direct the methods for interpreting the Park's varied resources.

Cultural resource sites that are easily accessible and historically important will be treated as significant interpretive stops. Access to other cultural resources will be improved only if the historical significance or resource integrity of a site made it worthy of a major interpretive effort and if its integrity is not threatened by an increase in visitation. The Park will increase efforts to inform the public, particularly in backcountry locations, that all historical and archeological objects are protected under federal law.

The Park will continue to seek additional ways to improve the living history program or other methods of interpreting Scotty's Castle.

The interpretation of prehistoric and contemporary Native American cultures will be integrated into parkwide interpretive themes, focusing on human adaptation to the desert environment. Programs, demonstrations, and guided walks will provide opportunities for visitors to understand these cultures. Tribal consultation will take place when planning interpretive opportunities pertaining to indigenous peoples.

To ensure the protection of especially fragile natural and cultural values, resource management specialists, interpretive planners, and designers will work together to develop ways for visitors to see the resources without causing unacceptable damage. The Salt Creek boardwalk is an example of this cooperative effort.

Many sites may contain fragile resources and safety hazards that must be considered when planning for access and interpretation. Measures will also be taken to mitigate any potential effects of increased visitor use. Wayside exhibits or brochures will be used to interpret these areas.

INFORMATION/ORIENTATION

Visitor Contact

Information and interpretive programs will focus on helping people learn about and enjoy the natural and cultural resources of the Park and giving them the opportunity to experience the intangible qualities that make the area unique — the quiet and isolation, the depth of colors, and the clear sky. Interpretative materials will reflect the different ecosystems represented in the Park's boundaries and will be developed at a level appropriate to a recognized need and location.

Providing interpretation and orientation information to visitors before they enter the Park will be emphasized. Visitors could also contact the Park by telephone, mail, internet, satellite information centers, and other means. The Park will continue to support the multiagency information center at Lone Pine, California, which serves visitors accessing Death Valley from the Owens Valley to the west, and the Mojave National Preserve's facility in Baker, California, which assists visitors approaching the Park from the I-15 corridor to the south. These points will provide additional locations for visitors to obtain orientation and interpretation information for the Park and the region prior to their arrival. The objective of supporting these offsite facilities will be to better prepare visitors for their visit to the Park.

Interpretive services will be provided wherever NPS staff could effectively connect with the public to increase their understanding and appreciation of Park resources. Staffed information/fee collection stations will continue to be located in Beatty, Nevada, and at Stovepipe Wells. Additional interpretive staffing and services will be placed at Stovepipe Wells to provide better year-round information to visitors.

Ranger stations at Grapevine, Wildrose, and Shoshone will also provide visitors with information and operate with volunteer staff as available. If visitation increases at these facilities, funding will be sought to increase NPS staff presence at these facilities to meet visitor demand for assistance.

Unstaffed orientation and information stations ("reception centers") will be developed within the Park along the Park's five major entrance roads that receive relatively high levels of traffic. These information stations will be proximal to fee collection stations, where applicable, so that visitors could receive additional information after paying entrance fees. Unstaffed information stations will function to help orient and inform visitors soon after they have crossed the Park boundary, rather than waiting to get information at the more distant developed areas in the Park interior.

Operations at Furnace Creek and Scotty's Castle will continue to provide visitor services such as a staffed visitor information desk, interpretive displays and exhibits, a large auditorium, and sales outlet of the Death Valley Natural History Association. Information on hiking, backcountry historical sites, and other day use activities will be made available at the visitor centers and the reception centers. The number of staffed interpretive programs will be expanded.

The Park will continue to maintain and enhance information on Death Valley via the National Park Service website (www.nps.gov/deva), and will continue to explore new opportunities for information distribution as technology develops. Death Valley is also a partner in a project to provide interagency desert-wide visitor information on the internet at a single site: (www.californiadesert.gov).

Visitor support services, such as site bulletins and information/interpretation wayside exhibits will be developed to complement the expanded Park boundaries. Wherever wayside exhibits are inappropriate and interpretation of resources is desired, brochures, or similar media, will be developed for specific themes or specific areas. They will be provided or offered for sale in appropriate locations.

Over 95% of the Park is designated wilderness and large portions of the Park are only accessible by four-wheel-drive vehicle, bicycle, or on foot. Visitors will explore these areas on their own. In these areas, onsite information/interpretive services will be minimal to non-existent and be restricted to threshold access points with few exceptions.

Waysides and Exhibits

Signs or exhibits will be posted at key road intersections leading to significant features. Distances, road conditions, and destinations or features along the way will be listed. This information will also help prevent people from mistakenly trying a road beyond their automobile's capability or their personal time limits. The Park will evaluate the need for trailhead information waysides that could serve visitors using trails. Design standards for these signs will be established in a Park sign plan.

Basic orientation information will also be made available on a 24-hour basis by using a variety of methods such as lighted exhibits, brochure dispensers, audio, permanent and portable information. Information and interpretive material would be available in other languages to meet the increasing demand. The use of international symbols and graphics will be used as much as possible to avoid multiple languages on displays.

The Park has many secondary entrances that receive moderate to light amounts of highway traffic. These points will be evaluated for the need to place information panels that will serve the same basic function as the information stations, but on a smaller scale. Each location will be evaluated to determine the appropriate information needed at each entrance.

Interpretive wayside exhibits within the Park will continue to be upgraded in accordance with a wayside exhibit plan. Additional wayside exhibits will be developed for key features along heavily traveled corridors in recently acquired lands and elsewhere in the Park if the need to interpret and or protect resources arises. Interpretive waysides will be kept to a minimal level (or number) on backcountry roads.

Partnerships

The National Park Service will continue to cooperate with other agencies and organizations to make information available along approach routes to the Park. Locations for displays and/or free publications outside of the Park will be considered to provide ways to serve people who want advanced information on the Park. Partnerships with communities, businesses and tourism associations may need to be developed to achieve this objective.

The Park will enter into partnerships with other land management units to provide the public with a variety of information on outdoor recreational opportunities within the region.

Partnerships will also be sought to fund various projects or projects within all management divisions in the Park.

VISITOR FACILITIES

Background

The Park has visitor centers at Furnace Creek and Scotty's Castle. The largest complex, centrally located at Furnace Creek, includes a staffed visitor information desk, interpretive displays on the natural and cultural features of the Park, a large auditorium featuring both orientation film and slide programs, and a sales outlet of the Death Valley Natural History Association. This facility, completed in 1960, was planned when annual visitation was 250,000. Its interpretive mediums are dated and focus on the monument lands. The 49ers association has provided assistance to the development of the visitor center.

Scotty's Castle visitor center is located in one of the historic structures north of the castle. New displays, which will depict the history of the people, construction of the buildings, acquisition by the National Park Service, and the significance of the complex are now in place. The visitor center contains a sales outlet, and during the summer season, it serves as a general information and ticket sales counter. The guided tour of the castle involves employees dressed in period costumes that tell the story of how the castle came to be and of the individuals who lived there.

Staffed information / fee collection stations in Beatty and at Stovepipe Wells operate on a full schedule seven days a week year-round. Ranger stations at Grapevine, Wildrose, and Shoshone provide visitors with information and operate with available volunteers.

The Park supports a multiagency information center at Lone Pine serving visitors accessing Death Valley from the Owens Valley to the west. Mojave National Preserve's Baker facility assists visitors approaching the Park from the I-15 corridor to the south. These facilities provide information, orientation, and interpretation for the Park and the region.

Plan Actions

All improvements to visitor facilities will be subject to federal requirements to meet accessibility standards for people with disabilities. The Park staff will also consider creative ways to increase the recreational opportunities for visitors with disabilities.

Entrance/Information Facilities

Care will be taken to visually blend these entrance / information stations with their surroundings. Entrance stations are planned for State Highway 190 on the east and west sides of the Park. This will improve visitor information as well as increasing fee revenues. The existing Grapevine Ranger Station will continue as an information station that is staffed as staff and funding allows.

Interpretive Facilities

The Park will continue to operate major visitor centers at Furnace Creek and Scotty's Castle. The largest visitor services complex is centrally located at Furnace Creek and includes a staffed visitor information desk, interpretive displays, a large auditorium, and the Death Valley Natural History Association sales outlet. This facility was completed in 1960 and designed when annual visitation was 250,000. In 1999, visitation was about 1.2 million. Its interpretive media is dated and focuses on the old monument lands. Actions will be taken to update this facility and improve interpretive displays and to expand the number of displays to include information on recently acquired lands. A comprehensive design plan will be prepared to update and improve the Furnace Creek visitor center.

Other structures at Scotty's Castle might be opened for public tours or adapted for other uses if these actions are compatible with recommendations from the historic resource study/historic structure report and the goals of restoring the resource's cultural landscape. Such uses might include exhibit space, audiovisual presentations, or curatorial space. The Park will prepare a study to consider ways to reduce long waits for tours and parking on busy holiday weekends at the Castle. Options might include a reservation system.

Comprehensive design packages for visitor facilities will strive to balance resource protection with visitor access and safety, minimize impacts on sensitive resources, and improve the visual quality of the areas and overall visitor experience. Measures will be taken to mitigate any potential effects of increased visitor use. Locations for such improvements include key attractions such as Badwater or especially sensitive natural and/or cultural resources such as Eureka Dunes and Devils Hole.

Developed Campgrounds

Background

Death Valley National Park has nine developed campgrounds that offer a variety of camping experiences. Most campground use occurs primarily from November through April because of the cooler temperatures. Most visitor use is concentrated at Furnace Creek and Stovepipe Wells. The Sunset campground at Furnace Creek consists of an expansive open area, which is used by recreational vehicles and trailers. Many people stay overnight in recreational vehicles, but the number of such users appears to be declining. The Park recorded 231,902 overnight stays by recreational vehicles in 1979 compared to 165,253 in 1995, a 28% decrease in RV users. Campgrounds at Furnace Creek and the group site at Texas Springs are on a campsite reservation system. Furnace Creek, Stovepipe Wells, Sunset and Texas Springs campgrounds are wheel chair accessible. Mahogany Flat, Thorndike, and Wildrose, on the west side of the Panamint mountain range (4,100–8,200 feet elevation), are subject to seasonal closures due to snow and other weather.

Death Valley has over 600 developed campsites. The following is a list of the campgrounds and their campsite numbers:

- Emigrant — 10 sites
- Furnace Creek — 136 sites
- Mahogany Flat — 10 sites
- Mesquite Spring — 30 sites
- Stovepipe Wells — 200 sites
- Sunset — 1000 sites
- Texas Spring — 92 sites
- Thorndike — 10 sites
- Wildrose — 30 sites

In 1997 five campgrounds charged a fee, either $16.00 or $10.00. Emigrant, Mahogany Flat, Thorndike, and Wildrose campgrounds do not charge fees.

The entrance fee to the Park in 1997 was $10.00. Fees are collected at the Grapevine entrance station, Beatty ranger station, Stovepipe Wells ranger station, Furnace Creek visitor center, and Baker visitor center. This is paid on a voluntary basis at all locations except the entrance station. Since there are no entrance stations on State Highways 190 or 178, it is not known how many people traveling these roads actually pay the entrance fee.

Plan Actions

The Park's existing campgrounds will be improved by eliminating safety hazards, better defining and separating sites, improving restrooms, and adding amenities such as newer picnic tables. Camping facilities at higher elevations will be upgraded to

enhance summer camping activities. All recreational vehicles (RV) campgrounds will be designed to meet national fire codes, which require 900 square feet per RV site and allow a maximum of 30 recreational vehicles per acre. The Park staff will work to identify issues and concerns related with tent camping and find ways to accommodate all types of campers, including tents, in developed campgrounds, while striving to enhance the visitor experience.

The existing campground at Stovepipe campground will be redesigned.

The Sunset, Texas Spring, and Furnace Creek campgrounds will be extensively redesigned to accommodate average winter demand and improve camping conditions. The total number of campsites at Sunset will be reduced because the campground is rarely used to capacity. Demands for additional camping areas, such as during the '49er Encampment and spring holidays, will be handled at designated overflow areas, which will be closed at other times. The Furnace Creek area development concept plan will incorporate these changes.

Recreational Activities

Background

Most visitation to Death Valley National Park has historically occurred during the cooler months of fall, winter and spring, but recent visitation figures indicate that visitation during the summer months has increased significantly to the point that Park staff no longer consider summer the slow part of the year. The months with the highest visitation figures in past years had been November, March, and April. High visitation in November is associated with the 49ers encampment. Recent visitation figures show a close balance between visitation in cool and hot months.

Death Valley has attracted people for many reasons, but the prime reasons seem to be the scenic beauty, the opportunity to visit the lowest and hottest place in the Western Hemisphere, and the notoriety of the name "Death Valley." People are also drawn to the area because of the contrasts that the desert provides to their place of residence. The majority of all visitors spend their time on the paved roads sightseeing and going to major attractions such as Dantes View, Scotty's Castle, and Badwater. Currently, very few of the total number of visitors venture onto unpaved roads to visit the remote sections of the Park. These sections include such places as Eureka Dunes, Saline Valley and Hunter Mountain, but that number is expected to increase as a result of recent newspaper and magazine articles and the promotion efforts of local communities.

Visitor surveys were conducted in 1990, 1994, and 1996. The 1990 survey was conducted by contacting visitors in developed and remote areas of the Park. The 1994 survey focused on backcountry areas of the Park and the 1996 survey was conducted in developed areas and major visitor attractions. The 1994 survey included Saline Valley. The results of these surveys indicate that visitors participated in the following activities:

Other activities which reported less than 20% participation include: visiting Scotty's Castle, stargazing, driving backcountry roads, taking a tour of the castle, hiking more than two hours, golfing and a mixture of other miscellaneous activities.

- 72% of foreign visitors were from France, Germany and Switzerland.
- 21% of all visitors were from California.
- 72% of the visitors spent less than 1 day in the Park.

The 1994 backcountry (remote sections of the Park) survey asked people why they came. People gave the following reasons:

- 96% came to view desert scenery
- 82% came to enjoy the wilderness and open space
- 81% enjoyed recreation such as hiking, driving back roads and camping
- 78% came to experience solitude and quiet
- 57% were there to learn more about local history
- 56% came to view and study plants and animals
- 16% came for "other" reasons such as photography, riding bicycles, study geology and geography, enjoy the warm clean air, and visit family and friends

The backcountry of Death Valley has been primarily used by California residents who return to seek solitude and desert scenery. Most visitors took day hikes and visited cultural sites. The survey also sampled visitors in the recently acquired Eureka and Saline Valleys. The Saline Warm Springs area continues to attract many visitors. It is estimated that 14,000 people travel the Saline Valley road each year. Park rangers reported approximately 120 vehicles parked at the warm springs the day after the Thanksgiving holiday in 1996. Visitors on the ground on that weekend reported the number of vehicles at 76.

Visitation to the Eureka Dunes is unknown at this time, but recent observations indicate a steady flow of visitors during the cooler months. Visitation to the Greenwater Valley and Saratoga Springs is relatively light at this time but may increase in the future.

There is a growing number of people who are choosing to explore the land with a mountain bike. Bicyclists have traveled the Saline Valley road and the Steele Pass road, which connects Saline and Eureka Valleys. BLM rangers have reported an increase in mountain bike use in the Deep Springs Valley, which is north of Eureka Valley. A 1995 backcountry visitor survey for Death Valley indicated that 10% of the users had ridden bikes on dirt roads.

Death Valley is an internationally recognized destination. Commercial tour groups visit Death Valley, often as part of a loop tour, which includes Las Vegas, Grand Canyon and Yosemite. Overnight stays associated with tour buses have increased significantly from 342 buses in 1983 to 2,185 buses in 1995. Many Europeans come by rental car and Asian visitors often come in tour buses. International tourism continues to be strong as currency exchange rates continue to be favorable. Many Europeans come during the hottest part of the summer to experience the extreme temperatures of summer and a landscape that is often a drastic contrast to their homeland.

Plan Actions

The Park will support recreational activities that are compatible with management objectives and current visitor needs. It is recognized that recreational trends continue to change and that specific, detailed direction on certain activities needs to be placed under a guiding statement which provides overall direction. NPS Management Policy on Recreational Activities provides guidance for determining the appropriateness of recreational activities in national park units. NPS *Management Policies* (NPS 2001) also states that each unit of the National Park Service has the responsibility to determine which recreational activities are appropriate or inappropriate, based upon the unit's purposes and values (see the purpose and significance statements for Death Valley National Park).

Unless the activity is mandated by statute, the National Park Service will not allow a recreational activity within a Park if it would involve or result in the following:

- inconsistency with the Park's enabling legislation or proclamation, or derogation of the values or purposes for which the Park was established
- unacceptable impacts on visitor enjoyment due to interference or conflict with other visitor use activities
- consumptive use of Park resources (this does not apply to certain traditional activities specifically authorized by NPS general regulations or by law)
- unacceptable impacts on Park resources or natural processes
- unacceptable levels of danger to the welfare or safety of the public, including participants

Day Use Areas

The following areas will remain designated as day use recreation only with no overnight camping:

- All paved road areas to 2 miles from the road
- Titus Canyon Road
- West Side Road
- Wildrose Road
- Skidoo Road
- Cottonwood Canyon Road (first 8 miles)
- Racetrack Road (from Teakettle Junction to Homestake Dry Camp)
- Lost Burro Mine
- Ubehebe Lead Mine
- The main valley floor from Ashford Mill north to 2 miles north of Stovepipe Wells.

Additional day use areas may be established in the new additions to the Park.

Backcountry and Roadside Camping

Background

The backcountry is defined as any area located away from Park development such as campgrounds, visitor or administrative facilities; typically a place where development is out of view. Designated wilderness is included within backcountry areas.

Eureka Dunes and Saline Valley Warm Springs have informal campgrounds, which receive moderate to heavy use. The dunes are easily accessible by car while the springs can be accessed by car if the weather provides for good road conditions. The National Park Service traffic count figures indicate a monthly average of 200 cars that go to the dunes. The dunes are habitat to two endangered plants. One of the major threats to these plants is illegal offroad vehicle use. There are an estimated four or five informal campsites north of the dunes along dirt roads. Visitors may also camp along a spur road northeast of the dunes. A day use parking area with a vault toilet and two or three picnic tables is located on the northwest corner of the dunes.

Another day use parking lot is located on the north central end of the dunes. This parking area is large enough to handle an estimated fifteen to twenty cars, depending on how people use the space. A two-foot-high pipe fence frames part of the parking lot to contain vehicles and discourage any driving on the dunes. The parking lot provides direct access to the dunes for hikers and those wanting to play on the sand. To protect endangered plants, minimum impact activities are encouraged.

Saline Valley Warm Springs receives use throughout the year. Over several years, visitors to the springs have built concrete hot tubs, a water system for the tubs, dug pit toilets, maintained the short access road, planted palm trees and a lawn to make their time at the springs more comfortable. In 1997 the National Park Service initiated the 30-day limit on camping that exists in the old monument. Marking posts have been placed in the ground to define the wilderness boundary surrounding the area in an attempt to keep vehicles out of wilderness and designate the camping area.

Public use of the springs has a history that goes back many years, but use began to rise during the 1960s, with this use level being sustained through the 1970s, 1980s, and into the 1990s. The place developed a social culture of its own, highlighted by a spirit of independence and freedom from the norms of traditional society of the day. Before the National Park Service obtained this land, visitors to the springs had developed their own social order and developed and managed constructed pools, camping and other facilities relatively independent of government funding or oversight. Visitors to the springs continue to provide maintenance to the facilities they have constructed, with the Park Service evolving the use and management of the area as a national park.

Backcountry camping must be more than 200 yards from any water source but is allowed at previously disturbed campsites that are 2 miles beyond developed areas, maintained roads, or day use areas. Camping is not allowed near the Lost Burro Mine and the Ubehebe Lead Mine or off several "day use only" dirt roads such as Titus Canyon and Racetrack road.

Plan Actions

Small, primitive campsites may be established in some remote areas of the Park to offer alternative camping experiences including Hidden Valley, Butte Valley, Echo Canyon, the Nevada Triangle, Racetrack Valley, and Johnson Canyon.

If camping in wilderness areas resulted in trampled vegetation or compacted soils over widespread areas, specific campsites will be designated. The current backcountry voluntary permit system will be replaced by a mandatory permit system when and where better resource protection was needed or where visitor use had exceeded the desired future

conditions for backcountry visitor experiences and resource conditions. The Park has the authority to limit any activity that is causing resource damage. Where sensitive areas are noted as receiving or have the potential to receive adverse impacts, designated camping sites may be designated away from the area for that area's protection.

A wilderness/backcountry management plan is currently being prepared by the Park staff. This new plan is necessary because of the broad changes in the amount of area in the Park that is now designated as wilderness. Until the wilderness/backcountry management plan is completed, camping will continue to be directed under existing management. Currently there are over 350 miles of backcountry roads that are open to camping (unless designated closed) with an unknown number of informal campsites. However, use levels at most of these areas is quite light. The Park will evaluate camping in Dedecker Canyon to determine potential and direct impacts upon the local bighorn sheep population and rare plants from visitor activities in the canyon. Park staff will determine whether the canyon or sections of the canyon should be closed to camping to reduce impacts. The Park will also reconsider the issue of allowing limited campfires in the backcountry and wilderness areas during the planning process for the backcountry and wilderness management plans.

An inventory and monitoring program will be established to gather data on backcountry visitor use and related impacts associated with car and other types of camping. Small primitive campsites may be established for car campers and other camps in remote areas of the Park that receive above average use and associated threats to Park resources. The management objective will be to mitigate negative impacts to Park resources, protect human health and safety and provide an alternative camping experience. Improvements will be the minimal tool needed to solve the problem, such as defined tent pads and or anchored picnic tables. This proposal may be considered within the backcountry management plan. If camping in wilderness or other backcountry areas results in destroyed vegetation of other negative impacts to resources or the visitor experience, management actions will be taken to mitigate or eliminate impacts. Management actions may include required camping at designated campsites and or closure of areas to camping.

Backcountry and roadside camping is currently permitted under the following conditions:

- Backcountry camping is allowed 2 miles beyond any developed area, maintained road, or "day use only" area. Other areas may be closed to camping. Visitors should check at the visitor or information centers for current information.
- Vehicle campers shall use pre-existing campsites.
- No camping is allowed in some historic mining districts or on the valley floor from Ashford Mill to 2 miles north of Stovepipe Wells.
- Organized groups with 16 or more people and/or stock animals and 7 or more vehicles need a special use permit.
- The length of stay is limited to 30 cumulative days per year.
- Campfires are currently prohibited outside of designated campgrounds. The proposed backcountry/wilderness management plan will consider where such fires may be permitted under controlled conditions.
- Visitors are not allowed to collect firewood.
- The Park initiated a voluntary backcountry use registration system in 1998 (see "Saline Valley").

Backcountry Cabins. The current, interim management of backcountry cabins allows visitors to use cabins on a first-come, first-served basis. Visitors are directed to use the cabins in a way that preserves and protects cabins for future use. The length of stay is limited to 30 days. The Park is currently preparing a survey and inventory of cabins in the Park. Results of this survey will be used to prepare further management direction for these cabins based upon their historic significance, condition, and use levels. When the survey is completed, the results will be interpreted and placed within the wilderness/ backcountry management plan.

NPS *Management Policies* provide the overall guidance regarding backcountry cabin management:

> "…facilities located in wilderness will be limited to the types and minimum number essential to meet the minimum requirements for the administration of the wilderness area…"
>
> "The construction or reconstruction of shelters for public use generally will not be allowed, since wilderness users should be self-supporting in terms of shelter. An existing shelter may be maintained only if the facility is necessary to achieve wilderness management objectives or cultural resource protection objectives."

Visitor Use in Saline Valley. A site specific management plan will be prepared in consultation with interested public through the NEPA process. The

goal of the plan is to create a strategy for management of the area consistent with NPS mandates and policies. The plan will address protection of natural and cultural resources, exotic species, public health and safety, and environmental restoration, environmental and social carrying capacity of the land, and designation of the site as a backcountry campground and the appropriate number and development of sites. The following will limit the scope of the activities permitted at the springs:

- Soaking tubs/spas will be limited to the current level of improvements.
- The Upper Springs will continue to be protected from human improvements and use and from burros.
- The Saline Valley Road will be maintained to its current surface condition by Inyo County.
- An analysis will be made of the Chicken Strip airstrip to determine whether to retain it under 36CFR or whether it should be closed due to safety and/or resource impact concerns.
- The proposed site plan will also consider options for the active restoration of the upper springs to a natural condition.

Depending upon future use levels and priorities, the National Park Service could consider maintaining some of the facilities at the springs.

The National Park Service will work with groups associated with the springs, to manage this place in a manner where all members of the public feel welcome. The National Park Service will not actively promote expanded public use of the springs.

Visitor Use Fees

Background

Recreational fees and their use are determined in accordance with the criteria and procedures of the Land and Water Conservation Fund Act of 1965 (sec. 4, 16 U.S.C.A. 4601-6a (Supp., 1974) and section 3, Act of July 11, 1972, 86 Stat. 461), the Recreational Fee Demonstration Program (P.L. 104-134), and regulations in 36 CFR 71. In April 2000, the National Park Service, in a partnership with the National Park Foundation, announced a new National Parks Pass. A parks pass provides entrance to all national parks for one year at a cost of $50. Parks selling the pass will be allowed to retain $35 for use on projects at that park. These passes are sold at all national parks and over the internet via several retail partners.

Plan Actions

The Park will continue to explore options for fee collection revenues consistent with congressional direction, including collection by third parties. In Death Valley National Park, entrance fees will continue to be collected at the Furnace Creek visitor center, Beatty, the Grapevine Entrance Station, Stovepipe Wells, and Baker. It is estimated that currently a significant amount of fees go uncollected. The construction of two entrance stations on Highway 190 is being actively planned to facilitate the collection of these fees and to improve visitor information at major entrances.

Nonrecreational fees will be collected for activities such as incidental business use permits, filming, and special park uses. Death Valley National Park has traditionally been an area where many companies come to film commercials and movies. The area receives a significant number of requests from automobile manufacturers to test vehicle-cooling systems. Filming and incidental business permits will continue to be granted on a case-by-case basis. Commercial tour buses are charged an entrance fee based on the seating capacity of the bus.

Commercial Services

Background

There are no commercial operation facilities located on federal lands recently acquired. Commercial use permits have been requested for filming and guided horse pack trips tours. More permits for other non-facility-based commercial operations will most likely be requested in the future. Park employees review compliance requests with Park regulations and approve appropriate uses.

Amfac Resorts operates a major visitor resort with lodging, food services, recreation, and employee housing. All of the commercial services are located on private land and are not under control by the National Park Service. Park management continues to work on a cooperative relationship with Amfac's local manager. The Furnace Creek Inn and Ranch are their two major operations, both located on 342 acres of private property. Amfac also manages the concessions operation at Stovepipe Wells, which has lodging, a restaurant, gas station, and swimming pool. They also manage a snack bar and gift shop at Scotty's Castle. Both operations at Stovepipe Wells and Scotty's Castle rest on NPS land and are subject to NPS controls on pricing and operations. The private operations at Furnace Creek provide visitors with 294 rooms, 2 swimming pools, an 18-hole golf

course, tennis courts, restaurants, gift shops, a service station, and general store. During the fall, winter, and spring, visitor accommodations are often sold out. Amfac now has 300–325 employees living at Furnace Creek; 89–90 live at Stovepipe Wells and 6 live at Scotty's Castle.

Panamint Springs Resort is on Highway 190 within the Park. This commercial operation is on private land and serves as a western gateway to the Park. The Park Service has no control over this operation but works in a cooperation with the owners. The resort has camping, lodging, a restaurant, and gas pumps.

Plan Actions

All commercial businesses that operate in the Park are required to obtain a commercial use permit. The National Park Service operates a concession contract providing lodging, a restaurant and bar, gift shops, general store, and gas service at Stovepipe Wells and food service, a gift shop, and gasoline at Scotty's Castle. It is NPS intent to continue these services. Private overnight lodging not overseen by the National Park Service exists at Furnace Creek and Panamint Springs. The National Park Service will continue to work with the private commercial operations at Furnace Creek and Panamint Springs to achieve mutual objectives and resolve potential problems. No duplicative concession services are planned; however, where additional visitor service needs arise, the Park will evaluate concessions as a means to provide such services.

Organized recreational activities, that originate from outside of the Park and for which a fee is charged (such as guided motor coach tours, guided horseback and hiking trips, photography workshops, nature seminars, etc.), are required to obtain an incidental business permit to conduct these activities. The permit is issued by Park staff and defines the terms under which the commercial activities can be conducted within the Park. The fee for this permit includes the direct and indirect costs of administering the permit. (There is currently a new law that shall require parks to issue Commercial Use Authorizations to replace the incidental business permit, but at present has not been instituted.) The Park will evaluate those commercial uses to ensure that the activities are compatible with Park purposes and that they don't detract or destroy the resources for which the Park was established. In some cases the Park may limit the number of commercial activities or operators if the Park Superintendent determines that Park values or resources are diminished or the Park visitor experience is compromised or intruded upon.

As the local and regional populations near Death Valley National Park increase, and if national and international visitation continue to increase throughout the year, the Park can expect more recreational activities to occur of a commercial nature or origin from outside of the Park. These activities may began to occur throughout the entire Park area and not just in the major tourist corridor of Highway 190 and the Furnace Creek area as currently exists. This may be especially true of the types of activities that originate from the Las Vegas, Nevada area as those visitors are looking for other recreational opportunities that exist beyond the city. The Park will be required to evaluate the types and numbers of these activities and shall issue no more commercial use authorizations "than are consistent with the preservation and proper management of Park resources and values."

General Development Concepts

A development concept plan is an intermediate plan between a general management plan and a specific design with construction drawings. These plans are applied to situations where there is a need to plan for visitor, or other administrative facilities. The process involves an analysis of human activities, natural systems, cultural features, and management objectives for a specific geographic area. Recommendations are then made on appropriate activities and the areas in which they should take place and on what facilities would be needed to support the desired end results. Development concept plans will be prepared for the following areas:

Scotty's Castle

A historic resources study, cultural landscape report, and historic structure reports will be prepared to help determine the appropriate uses of the historic structures and the appropriate manipulation of the environment. Upon completion of these reports, a development concept plan will be prepared to establish various facility requirements, the appropriateness of relocating maintenance and curatorial functions, visitor circulation patterns, staffing levels, and the location of employee housing. The concessions program at Scotty's Castle will be retained for the foreseeable future.

Furnace Creek and Cow Creek

A development concept plan will be prepared for administrative and visitor facilities at Furnace Creek and administrative facilities at Cow Creek. Presently the administrative facilities are inadequate. Planning for both areas will be guided by the desire to limit the growth of development and the related demand on Park resources such as water and land. This could be done by relocating some administrative activities that do not need to be within the Park to areas outside of the Park into adjacent communities or through conservation methods.

Grapevine

A development concept plan is underway. The purpose of this plan will be to remove unsightly and inadequate NPS housing and maintenance facilities from a public use area, to consolidate certain functions, provide more adequate housing for Park and concession employees, assure appropriate visitor services, visitor information, safety, and resource protection.

Employee trailer housing will be replaced and temporary facilities will be eliminated. Some National Park Service and concessioner employees now residing at Scotty's Castle might be relocated to Grapevine or another location. A small community building and recreation facilities may be provided. Some maintenance functions could be relocated from Scotty's Castle, and the museum-quality items now stored in various buildings at the castle might be moved into a climate-controlled structure at Grapevine or another location to ensure their appropriate storage (if appropriate space could not be found at the Castle or other locations).

Water and power may be limiting factors in the development of housing and maintenance areas at Grapevine. Further studies will determine if it would be feasible to utilize water in the area. All feasible alternatives will be explored in preparing the development concept plan. Some facilities may be relocated outside the Park.

Stovepipe Wells

Stovepipe Wells will be renovated in accordance with a site management plan. The concessions program at Stovepipe Wells will be retained for the foreseeable future.

- The existing campground will be redesigned.
- The ultimate number of RV hookup campsites at Stovepipe Wells will be determined as a part of the site plan.
- A paved section of the existing airstrip will be converted for helicopter use. The remainder of the airstrip will be converted to a gravel strip and not be used as an overflow camping area.
- Landscaping will utilize native species and will depend on water availability.

Wildrose

A site plan will be developed for the Wildrose area to determine the future direction of the facilities and use of the area. This may include appropriate use by the Timbisha Shoshone Tribe in accordance with a jointly developed memorandum of understanding between the Tribe and the Park.

Roads and Circulation

ROADS

Background

There are five state highway entrances to the Park and numerous unpaved entrances. Townes Pass and Furnace Creek, both on California Highway 190, are the principal entrance routes. Other access routes are Jubilee Pass, Daylight Pass, and Grapevine. Daylight Pass is more heavily used in the summer when people do not wish to take the linear route through the valley. Inyo County has indicated an intent to oil their section of the Big Pine road, which serves as an entrance into the northwest corner of the Park. Traffic on this entrance is lower than at other entrances; the average daily traffic from 1992 to 1995 is 10 vehicles per day. In 1996 the Park recorded 2,988 vehicles for an average of 8.2 cars per day. Use of the Eureka Sand Dunes may increase if Inyo County businesses continue to promote recreational visits to the dunes and if the County Road Department oils the remainder of the Big Pine road to the turn off to the dunes.

The Park has a vast network of roads, ranging from high-speed highways to unmaintained four-wheel drive roads. The Park staff maintains 696 miles of road. Of that, 243 miles are classified as standard vehicle roads, or paved or unpaved that require no more ground clearance than a standard sedan. High clearance or four-wheel drive roads constitute 442 miles, and about 10 miles are service spur roads. California State Highway 190, the main route through the Park, is maintained by the California Department of Transportation (Caltrans). In addition, there are many miles of roads maintained by the county or by mining companies. The Park encompasses hundreds of miles of unmaintained four-wheel drive routes. When the monument became a Park in 1994, it did not require responsibility for any additional paved roads. Most of the new NPS roads are unpaved four-wheel drive roads that provide access to remote locations such as the Saline Valley and Hunter Mountain. The Park has been approached by Caltrans to assume maintenance over about 10 miles of Highway 178 near Shoshone.

Plan Actions

The current road management plan for the Park will be reevaluated because of changes in visitor use patterns, the addition of more roads from Park expansion, and a need to readjust maintenance priorities in reaction to funding levels. The plan will determine such things as the status of duplicate road sections, road surface conditions, and the level of maintenance. An increasing number of buses are entering the Park, resulting in changing visitor use patterns on roads and elsewhere. The management philosophy will be to protect cultural and natural resources, enhance the visitor experience while providing for safe and efficient accommodation of Park visitors. It also will include the need to provide a road system that allows for a variety of driving experiences that are consistent with the purpose and significance statements of the Park. It is very unlikely that new roads will be created in the future unless there is strong justification to do so.

The practice of not performing routine maintenance on high clearance and four-wheel drive backcountry roads will continue. However, emergency repairs might be undertaken following flash floods. Vehicle use in the Park will be limited to street legal vehicles. No offroad driving will be permitted.

A review of the alignment of Highway 190 at Stovepipe Wells will be requested from Caltrans. The intent of this action is to decrease the potential for pedestrian/vehicle accidents near the gas station.

TRAILS

Background

The recently acquired lands contain an informal trail that leads up to Darwin Falls. This is a 2-mile round trip that winds its way up a narrow canyon through willows until the falls are reached. The trail needs some maintenance including pruning willows to allow hikers to pass through the thickets. The parking area for the trailhead has been pulled back out of the wash. There are informal trails in Saline Valley, where users of the warm springs have created trails to points of interest such as Rod Falls, the Seven Sisters Springs, and the Red Cinder Cone Trail. The Saline Valley road serves as access to trails located in the Inyo Mountains on BLM and USFS land. The Lonesome Miner trail head is accessed from off of the Saline Valley road up Hunter Canyon. This 49-mile trail which generally follows ridgelines extends from Hunter Canyon on the south to Reward Canyon on the north. Access to this trailhead is across NPS land.

There are many defined trails or identified hiking corridors within the old monument boundaries. Corridors are often defined by canyons, washes, or ridgelines. The lower elevation trails are frequently used during the cooler months of the year while the upper elevation trails get most of their use during the summer. Very few sources of drinking water exist along these trails or corridors, limiting the

duration of most hiking activities. Several trails or routes have been identified as day hikes, requiring less than a day to complete the whole route. Trail surfaces vary from paved, boardwalk to unmaintained soil conditions. The Park has identified approximately 16 miles of dirt trails, 1.5 miles of paved, 0.25 miles of boardwalk, and unlimited undefined hiking routes for day use.

Several routes and trails have also been identified for backcountry hikes, requiring more expenditure of time and effort by the hiker. The majority of backcountry hikes are defined as routes following canyons, ridges, abandoned roads or other land features. The Park has identified an unlimited number of miles and hiking routes or trails for visitors wishing to hike into remote sections of the Park. Some springs are present along routes, camping is allowed away from springs and voluntary backcountry permits are recommended. Telescope and Wildrose Peak trails are recommended as both day and backcountry hikes.

Very little trail maintenance has occurred over the years because of restricted staff and budgets. Telescope and Wildrose Peak trails are the only maintained, backcountry trails.

Plan Actions

At the present time, hiking is allowed on all open trails, while equestrian use is allowed in most areas. Single-track pedestrian walks or trails, such as Golden Canyon, will not be open to equestrian use. Bicycles will not be allowed on single-track trails or in wilderness. Cross-country foot or equestrian travel is allowed. No new trails are currently planned but will be considered in the wilderness/backcountry management plan.

The wilderness/backcountry management plan will address specific trail use by hikers, equestrians, and people with disabilities. The plan will also address the intensity of trail development, including the type and number of signs, trails, and trailheads, long distant trails extending into other jurisdictions, and the anticipated maintenance levels for developed trails. Abandoned roads in wilderness will continue to be closed to mechanized use (vehicles and bicycles) according to the Wilderness Act, but will be considered for use as trails in the wilderness plan. The 1989 *General Management Plan* called for a Panamint Crest Trail to be developed from Aguereberry Point south into Johnson or Warm Spring Canyon. The need for this is somewhat questionable given the open character of the area. This proposal will be re-examined by the Park in the wilderness/backcountry planning effort.

Trailhead orientation signs will be installed where appropriate to aid in visitor safety and resource protection.

SIGNS

Plan Actions

The Park's management direction on signs is for signs to be unobtrusive, minimal, and blend with the natural environment so that the undeveloped wild character and sense of exploration remains. A sign plan will be prepared by the National Park Service that will ensure this vision is carried out. The sign plan will provide for directional signs to major points of interest which are typically located on the major roads that receive most of the traffic. Secondary or backcountry roads will remain relatively free of directional signs. It is the intention of this management direction to keep visitors from becoming lost and allow the backcountry roads to remain lightly traveled. Efforts will be made in the sign plan to use international symbols or other appropriate methods to keep signs simple and easily understood for the broad spectrum of visitors entering the Park. Because the desert can be unforgiving in the summer, consideration will be given in the sign plan for signs that could help protect the health and safety of visitors unfamiliar with the desert. Boundary signs will be maintained at all Park access points in the backcountry to inform people that all historical, archeological, and natural objects are protected under federal law. A variety of media will also be used to minimize the proliferation of signs.

Administrative Operations and Facilities

PARK ADMINISTRATION

Background

Furnace Creek/Cow Creek

Furnace Creek serves as the main administrative headquarters for the Park and has a visitor center and an administrative office. These buildings were built in the late 1950s and are not large enough for all central office staff. As a result, the maintenance, resource protection, and visitor use staff are located at Cow Creek, 3 miles north of headquarters. The original adobe buildings at Cow Creek, built during the CCC era, include the old administrative building and several maintenance buildings. These buildings have gained historic status. The Furnace Creek, Cow Creek area functions as a small town with an airstrip, gas station, store, school, emergency fire, police, medical, and maintenance services. Park management is reviewing possible office space outside the Park.

Scotty's Castle

Scotty's Castle is located 55 miles north of headquarters. NPS employees work in a modular building located on the upper edge of the grounds. The building was brought in after a fire destroyed a historic building that had served as office space. Other buildings are now used for storing various materials.

Maintenance Facilities

More than 70% of the maintenance staff are now located at Cow Creek and 23% are at Scotty's Castle. One maintenance worker and three rangers are located at Stovepipe Wells. Rangers at Wildrose also assist in light maintenance of the three adjacent campgrounds. The maintenance division is responsible for over 50 buildings, 9 campgrounds, 243 miles of standard vehicle paved road, 442 miles of high clearance or 4x4 and 10 miles of service road, 60 houses and 8 water systems. Travel distances and extreme heat are two major obstacles in performing daily operations. Because Death Valley is now the largest national park in the contiguous United States, there are some limitations on how much the Park can accomplish under the current conditions. Maintenance and other Park staff need three hours to travel from Grapevine to Eureka Dunes and an additional two to three hours to drive from there to the Saline Valley Warm Springs.

The Cow Creek maintenance facility takes care of most visitor and administrative facilities because of its nearness to Furnace Creek and other intense visitor and administrative use zones. Several buildings including the auto shop are contained inside historic structures with adobe walls, which limits renovations and expansions. At this time, there is no adequate space or facilities for the maintenance operation, and employees are looking to expand onto the abandoned Salt Pan housing area or the current storage yard to the east. California Department of Transportation also has a maintenance yard just south of the main NPS yard.

The maintenance operation at Scotty's Castle maintains the historic structures and grounds, which require special attention. They are also responsible for employee housing at Grapevine, the campground at Mesquite Spring, and facilities at Eureka Dunes.

Plan Actions

The Park will make an effort to replaced nonnative plants and landscapes with native plants and landscapes around administrative and visitor facilities where appropriate for interpretive, aesthetic, water conservation and other management purposes. Efforts will be made to reduce the number of exotic plants such as athel tamarisk, oleander, and palms.

EMPLOYEE HOUSING

Background

The majority of the staff live at the Cow Creek housing area which has 60 housing units and 37 transient trailer/RV sites. Stovepipe Wells has seven units and six transient trailer/RV sites; Wildrose has three units; Grapevine has 16 units and two transient trailer sites; and Scotty's Castle has five units. Nine additional units are occupied by Caltrans, State Highway Patrol and Natural History Association employees. Grapevine has a severe shortage of housing, which has resulted in employees living at Cow Creek and commuting to Scotty's Castle, over a 60-minute commute. A housing development plan for Grapevine has been initiated by Park staff. Currently, the Park has 22 employment opportunities but no Park housing available. The contractor-conducted housing assessment completed in 1998 concluded that there was a need for an additional 19 housing units to meet current staffing needs. Park management believes there is a need for 76 additional units.

Park management is encouraging certain employees to seek housing outside the Park. Alternate work schedules have been initiated and telecommuting is being considered.

Plan Actions

The development concept plan underway for the Grapevine area will recommend providing housing and replacing the existing trailers for the northern district of the Park. Ongoing trailer replacement with permanent houses will continue.

Permanently placed trailers will never again be allowed at any NPS housing facility where they currently do not exist. Once the trailers at Grapevine are replaced, this policy will be extended to that location. Transient trailers and RVs are allowed in designated NPS areas, but not permanently placed trailers.

Prior to constructing additional housing for employees, the Park will evaluate the location of the housing and make a determination about whether private housing elsewhere within a one hour drive could serve the same need, and whether the total housing units are the minimum necessary to meet the mission of the Park.

SOLID WASTE DISPOSAL

The Park landfill near Furnace Creek has been closed to further use and current law and regulations prohibit landfills in parks. Solid waste disposal will continue to be hauled to approved landfills outside the Park.

PARK BOUNDARY AND AUTHORIZED ACREAGE

No changes in the boundary of the Park are proposed. Clerical or drafting corrections may be made to the maps and legal descriptions. During the prolonged debate over the expansion of the Death Valley National Monument and the creation of the Park by the California Desert Protection Act, the boundaries were subjected to considerable scrutiny and public debate. The National Park Service believes a comprehensive examination of potential boundary modifications at this time is unwarranted. The boundary map submitted to Congress in August 1996 reflects an accurate total acreage of 3,396,172 acres for Death Valley National Park.

The National Park Service intends to locate some facilities outside the Park, consistent with the existing management direction and actions proposed in this plan. This will include, but will not be limited to, visitor facilities in Beatty, Baker, and Lone Pine, as well as possibly other communities. It also includes the potential establishment of a satellite office in or around areas east of the Park to provide office space for some employees.

WILDERNESS

Background

On October 31, 1994, Congress designated approximately 3,158,033 acres (95%) of Death Valley as wilderness. The California Desert Protection Act (sec. 601b) also provides for the potential automatic creation of another 6,840 acres of wilderness along a powerline corridor from Furnace Creek to Stovepipe Wells upon cessation of the powerline use.

In 1964 Congress enacted the Wilderness Act, which [sec.2.(c)] defined wilderness as:

> A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological or other features of scientific, educational, scenic, or historical value (16 U.S.C. 1131).

Plan Actions

In 1994, Congress enacted the California Desert Protection Act, which designated 3,158,038 acres of Death Valley National Park (95% of the Park) as wilderness.

The Wilderness Act (section 4(c)) specifically prohibits the following activities in wilderness: commercial enterprises, permanent roads, temporary roads, use of motor vehicles, use of motorized equipment, use of motorboats, landing of aircraft, mechanical transportation, and structures or installations. Wilderness designation does not mean that existing structures within those areas have to be removed. If consideration is given to removing them, that action is covered by the same policies, regulations, and guidelines, and is subject to the same review and compliance procedures, as are historical structures in non-wilderness areas.

The Wilderness Act (section 5(a) and (b)) provides a right of access to parties recognizably vested in lands within BLM or U.S. Forest Service wilderness boundaries (sections 5 (a) and (b), are not applicable to NPS wilderness) including private landowners, state-owned lands, and valid mining rights and occupancies. These sections provide those owners of nonfederal lands or interests in lands may have a right to traverse wilderness to access these lands. Ranchers (on NPS grazing allotments) will normally be required to access wilderness on foot or horseback, similar to other users. However, certain situations may exist where motorized access is necessary to maintain range developments. These types of access could be considered under section 708 of the California Desert Protection Act that provides for adequate access and reasonable use and enjoyment to owners of nonfederal lands or interests that lie in wilderness. A minimum tool determination will be used prior to granting approval for motorized/ mechanical equipment use within wilderness.

Congressional action is needed for any boundary changes to designated wilderness areas.

The California Desert Protection Act modifies some provisions of the Wilderness Act. The following are the key provisions of the act related to wilderness:

- Native Americans may gain access to sacred sites in NPS or BLM wilderness, but such access must be consistent with the Wilderness Act [sec. 705.(a)].
- Federal reserved water rights are explicitly reserved for BLM and NPS wilderness [sec. 706(a)].
- Inholders have rights of adequate access for reasonable use and enjoyment in units of the national park system, including NPS wilderness and BLM wilderness [sec 708].

For each non-emergency entry, the grazing allottee may enter Park wilderness, under certain conditions, with a motorized/ mechanized vehicle or use motorized equipment with permission from the Superintendent. Emergency entry (imminent danger of loss of livestock, severe facility damage, an injured person requiring transport, or a life-threatening situation) with a motorized/mechanized vehicle and/or requiring the use of motorized equipment must be reported before or just after it occurs. Although over 95% of Death Valley is designated as wilderness, about 700 miles of roads (paved and dirt) remain open within this Park (Rothfuss 1996).

The National Park Service will manage wilderness areas for the use and enjoyment of the American people in a way that would leave them unimpaired for future use and enjoyment as wilderness. Management would include the maximum statutory protection allowed for these areas, the preservation of their wilderness character, and the gathering and dissemination of information regarding their use and enjoyment as wilderness. Public use of wilderness may include recreation, scenic preservation, scientific study, education, conservation, historical use, and solitude. A separate wilderness/ backcountry plan (in progress) will address specific management actions.

The Wilderness Act generally prohibits motorized equipment or mechanized transport in designated wilderness areas; however, it allows them "as necessary to meet minimum requirements for the administration of the area for the purpose of this Act." The Superintendent will administer wilderness lands in the Park with the minimum disturbance to the area or its resources. All decisions pertaining to administrative practices and use of equipment in wilderness will be based on this concept. Potential disruption of wilderness character and resources and applicable safety concerns will be considered before, and given significantly more weight than, economic efficiency. If some activities must occur in wilderness, only those actions that will have acceptable impacts will be acceptable.

The Park will use the "minimum tool" concept when proposing to control exotic vegetation within a wilderness area.

The process of delineating final wilderness boundaries for the Park is provided in title VI of the California Desert Protection Act. This process of determining and mapping the S-21 wilderness boundaries is still underway. The legal descriptions have not yet been prepared. Once completed, final wilderness boundary maps will be submitted to Congress. It is assumed that the actual wilderness acreage may deviate from the approximate acreage of 3,158,038 acres estimated in section 601 of the act.

The California Desert Protection Act (sec. 601b) provides for an additional 6,840 acres of the Park to become wilderness automatically upon cessation of all uses prohibited by the Wilderness Act and publication of such notice in the *Federal Register* by the Secretary of the Interior. This area is the powerline corridor from Furnace Creek to Stovepipe Wells as depicted in the *1989 General Management Plan*.

The NPS wilderness management policies are based on statutory provisions of the 1916 NPS Organic Act, the 1964 Wilderness Act and the California Desert Protection Act. In addition the Park uses the "Principles for Wilderness Management in the California Desert" for reference. These reference materials were developed in 1995 by the federal managers of the Mojave Desert for informational purposes. The managers represented the Bureau of Land Management (California Desert and Yuma Districts), the National Park Service (Death Valley and Joshua Tree National Parks and Mojave National Preserve), and the U.S. Fish and Wildlife Service (California State Supervisor). The Park staff will work with surrounding agencies to provide the maximum consistency in desert wilderness management.

LAND ACQUISITION

Background

Private lands (other than patented claims) occur in seven areas of the Park and cover about 4,200 acres.

The Statehood Act of 1850 granted to the state of California all unappropriated and surveyed sections 16 and 36. These sections (state school lands) in the Park are being considered for land exchanges with

other federal properties in the state. Most of the state land included in those grants within the old monument boundary has been acquired by the National Park Service through exchange. However, with the recent addition of lands to the Parks, the state of California still holds fee title to 82 parcels totaling 41,340 acres. The state also holds mineral rights on several parcels of land. The California State Lands Commission has requested from the Secretary of the Interior an exchange of state school lands for other surplus federal properties. The Secretary, as specified in section 707 of the California Desert Protection Act, has begun negotiations with the state to finalize the land exchange.

Plan Actions

The National Park Service is required by the USDI policy to prepare a land protection plan for every NPS unit that has nonfederal lands or interests in its authorized boundary. Detailed descriptions of the nonfederal lands and interests are also included. The National Park Service will seek funds to acquire the majority of private lands and interests in the Park based on priorities presented in the "Land Protection Plan." Private land at Furnace Creek and Panamint Springs will be acquired if requested by the owners. Private land in wilderness, habitat for threatened or endangered species, and riparian areas will be considered high priority for purchase. Donations and exchanges of real property from willing sellers will be a priority, and third party acquisitions from willing sellers will be encouraged. Exchange of state school sections in the new lands will continue to be actively exchanged pursuant to the California Desert Protection Act direction.

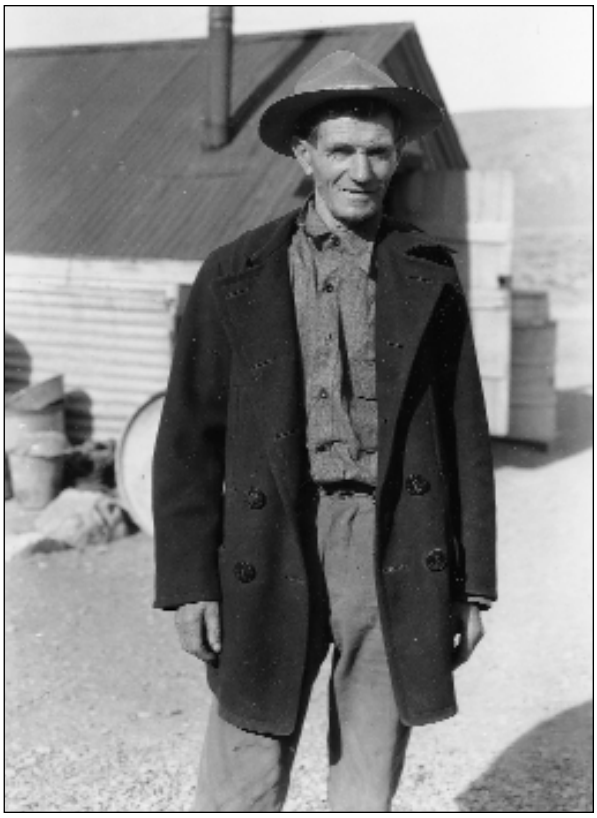
MINERAL DEVELOPMENT ACTIVITIES

Background

About 60% of private lands in Death Valley are patented mining claims. There are 19 patented mining claim groups totaling 6,444 acres. The Park also has approximately 125 unpatented mining claims covering about 2,262 acres. The National Park Service typically conducts a determination of validity on unpatented mining claims when a proposed plan of operation is received from an operator. This process may result in fewer unpatented mining claims in the Park as those that cannot support discovery of a valuable deposit are contested.

Plan Actions

The Park will administer mineral development activities under existing laws and regulations applicable to such activities. The Mining in the Parks Act of



1976 (P.L. 94-429) prescribed that all activities resulting from the exercise of valid existing rights on patented and unpatented mining claims within any area of the national park system shall be subject to regulations developed and administered by the National Park Service. The regulations governing mining activities on all patented and unpatented claims found at 36 CFR Part 9A require operators to file a plan of operations with the National Park Service for all mineral related activities. Proposed mining operations must meet the approval standards provided in the regulations and post a performance bond equivalent to the cost of reclamation before an operation will proceed.

No specific mining is authorized by this general management plan. Each mining proposal is required to submit a detailed mining and reclamation plan and undergo separate environmental impact analysis. Consultation for listed species and cultural resources would occur at that time. When mining is authorized, full reclamation of the site is required upon cessation of mining activity.

Congress also closed the Park to all new mining claim location and all other forms of appropriation and disposal. Section 305 of the California Desert Protection Act withdrew the Park from all forms of entry, appropriation or disposal under the public land

laws; from location, entry and patent under the United States mining laws; and from disposition under all laws pertaining to mineral and geothermal leasing and the sale of mineral materials. This provision of the act is subject to valid existing rights.

The National Park Service also regulates mineral development on valid nonfederal oil and gas interests in accordance with 36 CFR Part 9B. This involves property where the surface is held by the federal government, but the mineral rights were retained by the private party when the land was acquired.

Whenever a proposed mineral development fails to meet the regulatory approval standards and no alternative development scenario is feasible, the National Park Service will seek funding to initiate acquisition of the mineral rights.

The Park will also undertake a sensitive resource analysis based on an objective analysis of physical, biological, cultural and visitor use values relative to projected mining impacts. This analysis will examine potential mineral development scenarios that will be likely to occur on each property based on the deposit, and assuming operator performance standards and specific mitigation will be applied to protect resources and values. The results of this analysis will be used to identify areas of the Park where mineral development will be inconsistent with the mission of the Park and likely mineral development will not be able to meet 36 CFR Part 9A or 9B approval standards. In these areas, acquisition of the mineral rights will be pursued.

Abandoned Mines

The legacy of past mining in the Park has left hundreds of abandoned mine sites with possibly thousands of mine openings and workings. Experience in the old monument lands and preliminary observations on the new lands indicate the problem is a significant land management issue. The 1992 Western Region Directive WR-085, Management of Abandoned Mineral Lands (AML) outlines the framework for a Park AML program. The National Park Service will conduct a comprehensive inventory of all AML sites in the Park to serve as the basis for future planning and reclamation program implementation. The inventory will build upon existing information from the U.S. Geological Survey, Bureau of Mines and Bureau of Land Management databases, as well as previous data collected by Park staff. The program goals will include elimination of physical safety hazards and hazardous materials; mitigation of adverse environmental impacts to Park resources, including the restoration of landscapes, soils and vegetation; protection of important wildlife habitat such as bat habitat; and preservation of historic and cultural resources which may include stabilization of structures.

Sand and Gravel for Road Maintenance

The use of borrow sources for road maintenance will be evaluated during the preparation of the road management plan. Such use will conform to NPS *Management Policies.*

Cattle Grazing

Background

Cattle have grazed in California's northern and eastern Mojave Desert for well over 100 years. With the signing of the California Desert Protection Act of 1994, Death Valley National Park acquired a portion of four BLM grazing allotments: Eureka Valley, Last Chance, Hunter Mountain, and Lacey-Cactus-McCloud. Eureka Valley and Lacey-Cactus-McCloud have small acreages with no substantial animal unit months. The portions of these allotments in Death Valley have been cancelled. The Last Chance allotment has not been issued a permit since 1996 due to the lack of forage. At the time of the passage of the CDPA, the NPS portion of this permit contained 1,628 AUMs. The Hunter Mountain allotment occurs on both NPS and BLM lands. The NPS portion covers about 86,400 acres and contains 1,105 AUMs.

Plan Actions

No grazing is permitted on the former monument lands. As authorized by the California Desert Protection Act of 1994, the privilege of cattle grazing within the Park shall continue at no more than the October 31, 1994 level and is subject to applicable NPS regulations, policies, and Park management direction.

The animal unit months (AUMs) for each grazing permit in Death Valley National Park at the time of the signing of the California Desert Protection Act (1994) were:

	AUMs
Hunter Mountain	1,105
Last Chance	1,628
Eureka Valley	0
Lacey-Cactus-McCloud	0

No grazing will be permitted on the NPS portions of the Eureka Valley or Lacey-Cactus-McCloud BLM allotments. No permit has been issued on the Last Chance allotment since 1996 due to the lack of forage. The NPS considers this area of the Park to be permanently retired from grazing. The NPS will work with the permittee on the Hunter Mountain allotment to develop grazing practices and levels, not to exceed 1,105 AUMs through development of a grazing management plan. This area has a defined season of use from November 20 to June 30.

The AUMs as of the date of the current planning effort (2000) within Death Valley National Park is:

	AUMs
Hunter Mountain	1,105
Last Chance	0
Eureka Valley	0
Lacey-Cactus-McCloud	0

The California Desert Protection Act directs the Secretary of the Interior to make the acquisition of "base property" from willing sellers a priority above all other acquisitions in the Park. Death Valley's management goal is to achieve the permanent retirement of grazing. If ranchers notify the Superintendent of their willingness to sell base property, the Superintendent would immediately notify the Secretary of the Interior of the priority acquisition and request Land and Water Conservation funding from Congress. The Park will also work with conservation organizations to purchase grazing permits from willing sellers. Once a grazing permit was purchased and the new owners (i.e. conservation organizations) request retirement, it will be permanently retired. Also, if an allotment were placed in a nonuse status, after a period of five years, it will be permanently retired.

Where permits are acquired or retired, ranch developments could eventually be removed and site restoration undertaken.

The NPS grazing management plan will evaluate all significant resources in the permit area. Those resources include sensitive plants, habitats, other unusual plant assemblages, sensitive animals, and cultural resources. The plan will include how many cattle and the time and place where these cattle will be allowed to graze, seasonal restrictions, the placement/movement of mineral blocks and water facilities as a tool to alter cattle use patterns, pasture rotation, etc. The plan will also establish a monitoring protocol to allow frequent evaluations of the Park resources to evaluate efficacy of the management practices. Management changes will be made accordingly.

Fees will be based on BLM schedules and NPS Special Use Permit costs. Grazing fees will be used for Park resource management and restoration projects. Restrictions on grazing use will be based on resource conditions, visitor safety and wilderness values. The Superintendent has the discretion to lower grazing use levels, as necessary to respond to resource protection needs, visitor safety, or wilderness values. Use levels will be based, in the interim, on existing permit plans, and if changed, will be based on scientific data, and on water, forage, protection of threatened and endangered species, riparian areas, water availability, and soils.

In regard to access, ranchers will normally be required to access wilderness on foot or horseback, similar to other users. However, certain situations may exist where motorized access is necessary to maintain range developments. These types of access could be considered under section 708 of the California Desert Protection Act that provides for adequate access and reasonable use and enjoyment to owners of nonfederal lands or interests that lie in wilderness. A minimum tool determination will be used prior to granting approval for motorized/mechanical equipment use within wilderness. Death Valley National Park will follow the Wilderness Act and the California Desert Protection act in the administration of the Park's wilderness areas.

Permit area fences will be inspected to ensure they provide for movement of wildlife. In cases where movements may be impeded modifications would be required.

If the grazing permittee seek to acquire new water rights for the permit area, NPS *Management Policies* require that all rights to the use of water diverted to or used on federal lands within national parks will be perfected in the name of the United States.

Under this plan three of four permits have been permanently retired. The National Park Service will allow cattle grazing of 1,105 animal unit months on the Hunter Mountain permit area and until such time as all grazing is retired, subject to the considerations indicated above.

Plan Implementation

OPERATIONAL COSTS

The existing Park operating base in FY 01 is $6.8 million and existing staffing is 118. In order to fully implement the proposed action over the 15-year life of the plan, and assuming that above proposed activities are undertaken and visitor use of the Park increases, an additional 37 staff will be needed. This will require approximately $1.7 million per year added to the Park's operating base to cover salaries, benefits, and administrative expenses (space, utilities, vehicles, etc.).

The estimated costs of acquiring private lands and mining claims under this alternative are not yet available. No comprehensive evaluation of land acquisition costs has been undertaken in accordance with NPS policy and therefore cannot be estimated at this time. The cost of acquiring property involves title searches, appraisals, relocation costs, and fair market value of the property. These specific costs will be available only on a property by property basis and will need to be determined based on current market values. An approved cost estimate for the land protection alternative selected will be prepared at a later date by the Washington office.

Construction and planning cost estimates are conceptual estimates only. These are costs of similar types of facilities and past NPS experience derived from contract data. The estimates include indirect costs added to cover such things as design services, contract supervision, and contingencies. They also take into account the cost of contracting for such services in a remote Park setting, seasonal constraints, labor availability, and wage rates. The costs are based on 2000 values.